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*** YOU HAVE NEW MAIL ***

=> s nucleotide? and thiol? (4a) base?
L1 353 NUCLEOTIDE? AND THIOL? (4A) BASE?

=> s l1 and linker?
L2 199 L1 AND LINKER?

=> s l2 and thiol (2a) base
L3 28 L2 AND THIOL (2A) BASE

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4 28 DUP REM L3 (0 DUPLICATES REMOVED)

=> d l4 bib abs 1-28

L4 ANSWER 1 OF 28 USPATFULL on STN
AN 2004:7963 USPATFULL
TI Method for sequential support-bound synthesis of conjugated oligomeric compounds
IN Maier, Martin A., Carlsbad, CA, UNITED STATES
Guzaev, Andrei P., Carlsbad, CA, UNITED STATES
Manoharan, Muthiah, Carlsbad, CA, UNITED STATES
PI US 2004006203 A1 20040108
AI US 2002-176419 A1 20020620 (10)
DT Utility
FS APPLICATION
LREP WOODCOCK WASHBURN LLP, ONE LIBERTY PLACE - 46TH FLOOR, PHILADELPHIA, PA, 19103
CLMN Number of Claims: 45
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 2821
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A sequential support-bound synthesis method is disclosed for preparing a conjugated oligomeric compound, preferably a PNA-peptide conjugate or an oligonucleotide-peptide conjugate, using a bridging molecule having at

least two N-protecting amino groups. A conjugated oligomeric compound for therapeutic or prophylactic delivery is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 2 OF 28 USPATFULL on STN
AN 2003:319267 USPATFULL
TI Chimeric immunomodulatory compounds and methods of using the same - III
IN Fearon, Karen L., Lafayette, CA, UNITED STATES
Dina, Dino, Oakland, CA, UNITED STATES
Tuck, Stephen F., Oakland, CA, UNITED STATES
PI US 2003225016 A1 20031204
AI US 2002-328578 A1 20021223 (10)
RLI Continuation-in-part of Ser. No. US 2002-176883, filed on 21 Jun 2002, PENDING Continuation-in-part of Ser. No. US 2002-177826, filed on 21 Jun 2002, PENDING
PRAI US 2001-299883P 20010621 (60)
US 2002-375253P 20020423 (60)
US 2001-299883P 20010621 (60)
US 2002-375253P 20020423 (60)
DT Utility
FS APPLICATION
LREP Randolph T. Apple, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 19 Drawing Page(s)
LN.CNT 7262
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides immunomodulatory compounds and methods for immunomodulation of individuals using the immunomodulatory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 28 USPATFULL on STN
AN 2003:283122 USPATFULL
TI Chimeric immunomodulatory compounds and methods of using the same - II
IN Fearon, Karen L., Lafayette, CA, UNITED STATES
Dina, Dino, Oakland, CA, UNITED STATES
Tuck, Stephen F., Oakland, CA, UNITED STATES
PI US 2003199466 A1 20031023
AI US 2002-177826 A1 20020621 (10)
PRAI US 2001-299883P 20010621 (60)
US 2002-375253P 20020423 (60)
DT Utility
FS APPLICATION
LREP Randolph T. Apple, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 7228
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides immunomodulatory compounds and methods for immunomodulation of individuals using the immunomodulatory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 28 USPATFULL on STN
AN 2003:250945 USPATFULL
TI Chimeric immunomodulatory compounds and methods of using the same - I
IN Fearon, Karen L., Lafayette, CA, UNITED STATES

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Dina, Dino, Oakland, CA, UNITED STATES
Tuck, Stephen F., Oakland, CA, UNITED STATES
PI US 2003175731 A1 20030918
AI US 2002-176883 A1 20020621 (10)
PRAI US 2001-299883P 20010621 (60)
US 2002-375253P 20020423 (60)
DT Utility
FS APPLICATION
LREP Randolph T. Apple, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 7092
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides immunomodulatory compounds and methods for immunomodulation of individuals using the immunomodulatory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 28 USPATFULL on STN
AN 2003:237692 USPATFULL
TI Methods and reagents for introducing a sulfhydryl group into the 5'-terminus of RNA
IN Zhang, Biliang, Shrewsbury, MA, UNITED STATES
Cui, Zhiyong, Worcester, MA, UNITED STATES
Zhang, Lei, Agawam, MA, UNITED STATES
PI US 2003165849 A1 20030904
AI US 2001-996139 A1 20011127 (9)
PRAI US 2000-253564P 20001128 (60)
DT Utility
FS APPLICATION
LREP NUTTER MCCLENNEN & FISH LLP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02210-2604
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 1544
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for synthesizing RNA molecules whose 5'-terminus comprises a thiol group are disclosed. The present invention discloses the formation of 5'-HS-PEG-GMP-RNA and 5'-GMPS-RNA which upon alkaline phosphatase treatment, independently lead to a 5'-HS-RNA molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 28 USPATFULL on STN
AN 2003:200449 USPATFULL
TI Selective cellular targeting: multifunctional delivery vehicles, multifunctional prodrugs, use as antineoplastic drugs
IN Glazier, Arnold, Newton, MA, UNITED STATES
PA Drug Innovation & Design, Inc. (U.S. corporation)
PI US 2003138432 A1 20030724
AI US 2000-738625 A1 20001215 (9)
RLI Continuation of Ser. No. US 2000-712465, filed on 15 Nov 2000, ABANDONED
PRAI US 1999-165485P 19991115 (60)
US 2000-239478P 20001011 (60)
US 2000-241939P 20001010 (60)
DT Utility
FS APPLICATION
LREP N. Scott Pierce, Esq., HAMILTON, BROOK, SMITH & REYNOLDS, P.C., Two Militia Drive, Lexington, MA, 02421-4799

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CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 18716
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to the compositions, methods, and applications of a novel approach to selective cellular targeting. The purpose of this invention is to enable the selective delivery and/or selective activation of effector molecules to target cells for diagnostic or therapeutic purposes. The present invention relates to multi-functional prodrugs or targeting vehicles wherein each functionality is capable of enhancing targeting selectivity, affinity, intracellular transport, activation or detoxification. The present invention also relates to ultra-low dose, multiple target, multiple drug chemotherapy and targeted immunotherapy for cancer treatment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 28 USPATFULL on STN
AN 2003:194178 USPATFULL
TI Immunomodulatory compositions, formulations, and methods for use thereof
IN Fearon, Karen L., Lafayette, CA, UNITED STATES
Dina, Dino, Oakland, CA, UNITED STATES
PI US 2003133988 A1 20030717
AI US 2002-214799 A1 20020807 (10)
PRAI US 2001-310743P 20010807 (60)
US 2001-335263P 20011025 (60)
DT Utility
FS APPLICATION
LREP Nicholas S. Buffinger, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
CLMN Number of Claims: 63
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3014
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides new compositions and methods for immunomodulation of individuals. Immunomodulation is accomplished by administration of immunomodulatory polynucleotide/microcarrier (IMO/MC) complexes comprising 3-6 mer immunomodulatory oligonucleotides. The IMO/MC complexes may be covalently or non-covalently bound. Also provided are immunomodulatory compositions comprising a 3-6 mer IMO encapsulated in an MC.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 28 USPATFULL on STN
AN 2003:187464 USPATFULL
TI Biodegradable immunomodulatory formulations and methods for use thereof
IN Van Nest, Gary, Martinez, CA, UNITED STATES
Tuck, Stephen, Oakland, CA, UNITED STATES
PI US 2003129251 A1 20030710
AI US 2001-802359 A1 20010309 (9)
PRAI US 2000-188303P 20000310 (60)
DT Utility
FS APPLICATION
LREP MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018
CLMN Number of Claims: 71
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2569
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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AB The invention provides new compositions and methods for immunomodulation of individuals. Immunomodulation is accomplished by administration of immunomodulatory polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may be covalently or non-covalently bound, and feature a polynucleotide comprising at least one immunostimulatory sequence bound to a biodegradable microcarrier or nanocarrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 9 OF 28 USPATFULL on STN
AN 2003:146381 USPATFULL
TI Fusion protein arrays on metal substrates for surface plasmon resonance imaging
IN Corn, Robert M., Madison, WI, UNITED STATES
Smith, Emily A., Madison, WI, UNITED STATES
Weisblum, Bernard, Madison, WI, UNITED STATES
Erickson, Matthew G., Madison, WI, UNITED STATES
Ulijasz, Andrew T., Madison, WI, UNITED STATES
Wanat, Matthew J., Madison, WI, UNITED STATES
PI US 2003100127 A1 20030529
AI US 2002-99424 A1 20020315 (10)
PRAI US 2002-362178P 20020306 (60)
US 2001-304246P 20010710 (60)
DT Utility
FS APPLICATION
LREP DEWITT ROSS & STEVENS S.C., 8000 EXCELSIOR DR, SUITE 401, MADISON, WI, 53717-1914
CLMN Number of Claims: 78
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 1886
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are methods for making surface plasmon resonance-capable arrays wherein molecules, such as proteins or nucleic acids, or cells, are adhered to a metal substrate. The metal substrates are modified by depositing an ω-modified alkanethiol monolayer to the substrate and then contacting the ω-modified monolayer with a heterobifunctional linking compound. Biomolecules or cells can then be attached to the heterobifunctional linking compound. Also disclosed are arrays wherein glutathione-containing molecules are immobilized on the substrate and GST-containing molecules are then specifically immobilized onto the substrate, taking advantage of the affinity between glutathione and GST.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 10 OF 28 USPATFULL on STN
AN 2003:86168 USPATFULL
TI Immunomodulatory formulations and methods for use thereof
IN Van Nest, Gary, Martinez, CA, UNITED STATES
Tuck, Stephen, Oakland, CA, UNITED STATES
Fearon, Karen L., Lafayette, CA, UNITED STATES
Dina, Dino, Oakland, CA, UNITED STATES
PI US 2003059773 A1 20030327
AI US 2001-927884 A1 20010810 (9)
RLI Continuation-in-part of Ser. No. US 2001-802376, filed on 9 Mar 2001, PENDING
PRAI US 2000-188557P 20000310 (60)
DT Utility
FS APPLICATION
LREP Karen R. Zachow, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018

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CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2969
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides new compositions and methods for immunomodulation of individuals. Immunomodulation is accomplished by administration of immunomodulatory polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may be covalently or non-covalently bound, and feature a polynucleotide comprising at least one immunostimulatory sequence bound to a nonbiodegradable microcarrier or nanocarrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 11 OF 28 USPATFULL on STN
AN 2003:70981 USPATFULL
TI Immunomodulatory polynucleotides and methods of using the same
IN Fearon, Karen L., Lafayette, CA, UNITED STATES
Dina, Dino, Oakland, CA, UNITED STATES
PI US 2003049266 A1 20030313
AI US 2001-33243 A1 20011227 (10)
PRAI US 2000-258675P 20001227 (60)
DT Utility
FS APPLICATION
LREP Karen R. Zachow, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
CLMN Number of Claims: 48
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3623
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides immunomodulatory polynucleotides and methods for immunomodulation of individuals using the immunomodulatory polynucleotides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 12 OF 28 USPATFULL on STN
AN 2003:30903 USPATFULL
TI Biodegradable immunomodulatory formulations and methods for use thereof
IN Nest, Gary Van, Martinez, CA, UNITED STATES
Tuck, Stephen, Oakland, CA, UNITED STATES
Fearon, Karen L., Lafayette, CA, UNITED STATES
Dina, Dino, Oakland, CA, UNITED STATES
PI US 2003022852 A1 20030130
AI US 2001-927422 A1 20010810 (9)
RLI Continuation-in-part of Ser. No. US 2001-802359, filed on 9 Mar 2001, PENDING
PRAI US 2000-188303P 20000310 (60)
DT Utility
FS APPLICATION
LREP MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018
CLMN Number of Claims: 84
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3417
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides new compositions and methods for immunomodulation of individuals. Immunomodulation is accomplished by administration of immunomodulatory polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may be covalently or non-covalently bound, and feature a polynucleotide comprising at least one immunostimulatory sequence

bound to a biodegradable microcarrier or noncarrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 13 OF 28 USPATFULL on STN
AN 2003:155672 USPATFULL
TI Method for the treatment of cystic fibrosis
IN Macias, William Louis, Indianapolis, IN, United States
PA Eli Lilly and Company, Indianapolis, IN, United States (U.S. corporation)
PI US 6576654 B1 20030610
WO 9916453 19990408
AI US 2000-508209 20000308 (9)
WO 1998-US19906 19980923
DT Utility
FS GRANTED
EXNAM Primary Examiner: Weddington, Kevin E.
LREP Benjamin, Roger S.
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 2942
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method is disclosed for the treatment of cystic fibrosis by administering to a human in need thereof a therapeutically effective amount of an sPLA.sub.2 inhibitor, such as a 1H-indole-3-glyoxylamide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 14 OF 28 USPATFULL on STN
AN 2002:307840 USPATFULL
TI DNA-bridged carbon nanotube arrays
IN Kelley, Shana O., Boston, MA, UNITED STATES
Fourkas, John, Chestnut Hill, MA, UNITED STATES
Naughton, Michael, Norwood, MA, UNITED STATES
Ren, Zhifeng, Newton, MA, UNITED STATES
PI US 2002172963 A1 20021121
AI US 2002-42911 A1 20020109 (10)
PRAI US 2001-260758P 20010110 (60)
DT Utility
FS APPLICATION
LREP PALMER & DODGE, LLP, PAULA CAMPBELL EVANS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199
CLMN Number of Claims: 59
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 1170
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A class of biological sensing devices that include a substrate comprising an array of carbon nanotubes (CNTs) to which are chemically attached biological molecules is disclosed. The attached biological molecules are capable of electrical conductivity that is responsive to chemical changes occurring as a result of their interaction with target species. A means for means for using DNA as a material of potential in molecular electronic sensor devices, being primarily based on molecular electron-transfer reaction processes between DNA-binding donors and acceptors is also disclosed, including composition, method of manufacture and their use are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 15 OF 28 USPATFULL on STN

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AN 2002:164713 USPATFULL
TI Crystal structure of worm NitFhit reveals that a Nit tetramer binds two Fhit dimers
IN Croce, Carlo, Philadelphia, PA, UNITED STATES
Brenner, Charles, Philadelphia, PA, UNITED STATES
Pekarsky, Yuri, Philadelphia, PA, UNITED STATES
PI US 2002086331 A1 20020704
AI US 2001-855294 A1 20010515 (9)
PRAI US 2000-204713P 20000516 (60)
DT Utility
FS APPLICATION
LREP THOMAS JEFFERSON UNIVERSITY, 1020 Walnut Street - Suite 630, Philadelphia, PA, 19107-5587
CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 2059
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB In invertebrates, Fhit is encoded as a fusion protein with Nit. Outside of invertebrates, Nit homologs are found as separate polypeptides in organisms with Fhit homologs. Therefore, Nit and Fhit are expected to interact physically and function in the same cellular pathway. The structure of the NitFhit fusion protein and interactions between the Nit and Fhit polypeptides are defined. The present invention relates to the identification of small molecules that interact with, and regulate, the Nit protein. The present invention further relates to therapeutic compositions and their uses in regulating Nit activity, thereby modulating cellular proliferation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 16 OF 28 USPATFULL on STN
AN 2002:106268 USPATFULL
TI Immunomodulatory formulations and methods for use thereof
IN Nest, Gary Van, Martinez, CA, UNITED STATES
Tuck, Stephen, Oakland, CA, UNITED STATES
PI US 2002055477 A1 20020509
AI US 2001-802376 A1 20010309 (9)
PRAI US 2000-188557P 20000310 (60)
DT Utility
FS APPLICATION
LREP Karen R. Zachow, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
CLMN Number of Claims: 66
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2435
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides new compositions and methods for immunomodulation of individuals. Immunomodulation is accomplished by administration of immunomodulatory polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may be covalently or non-covalently bound, and feature a polynucleotide comprising at least one immunostimulatory sequence bound to a nonbiodegradable microcarrier or nanocarrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 17 OF 28 USPATFULL on STN
AN 2002:254185 USPATFULL
TI Methods for determining single **nucleotide** variations and genotyping
IN Miller, Andrew P., San Diego, CA, United States

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PA DNA Sciences, Inc., Fremont, CA, United States (U.S. corporation)
PI US 6458544 B1 20021001
AI US 2000-728451 20001201 (9)
PRAI US 1999-168580P 19991202 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Strzelecka, Teresa
LREP Townsend and Townsend and Crew LLP
CLMN Number of Claims: 39
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 1354
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods and kits for determining the identity of a **nucleotide** at a variant site on a target nucleic acid. The methods begin with the template-dependent amplification of a target sequence under defined conditions to achieve selective incorporation of a **nucleotide** analog at the variant site. Amplification product is then subjected to limited degradation to create products having allele-specific sizes, which are subsequently separated on the basis of size. Finally, the number of products and their sizes is to assessed to determine the identity of the **nucleotide**(s) at the variant site and the genotype of the organism from which the target was obtained.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 18 OF 28 USPATFULL on STN
AN 2001:176372 USPATFULL
TI Method and apparatus for combinatorial chemistry
IN Foote, Robert S., Oak Ridge, TN, United States
PI US 2001029028 A1 20011011
AI US 2001-859028 A1 20010516 (9)
RLI Continuation of Ser. No. US 1999-305591, filed on 5 May 1999, PENDING
DT Utility
FS APPLICATION
LREP LUEDEKA NEELY & GRAHAM, P.C., P O BOX 1871, KNOXVILLE, TN, 37901-1871
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 1150
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method and apparatus are provided for performing light-directed reactions in spatially addressable channels within a plurality of channels. One aspect of the invention employs photoactivatable reagents in solutions disposed into spatially addressable flow streams to control the parallel synthesis of molecules immobilized within the channels. The reagents may be photoactivated within a subset of channels at the site of immobilized substrate molecules or at a light-addressable site upstream from the substrate molecules. The method and apparatus of the invention find particularly utility in the synthesis of biopolymer arrays, e.g., oligonucleotides, peptides and carbohydrates, and in the combinatorial synthesis of small molecule arrays for drug discovery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 19 OF 28 USPATFULL on STN
AN 2001:190907 USPATFULL
TI Length determination of nucleic acid repeat sequences by discontinuous primer extension
IN Livak, Kenneth J., San Jose, CA, United States

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Lowe, Adam L., San Francisco, CA, United States
Blasband, Andrew J., Redwood City, CA, United States
PA PE Corporation (NY), Foster City, CA, United States (U.S. corporation)
PI US 6309829 B1 20011030
AI US 1998-205114 19981203 (9)
RLI Continuation-in-part of Ser. No. US 1997-863437, filed on 27 May 1997, now patented, Pat. No. US 5945284
DT Utility
FS GRANTED
EXNAM Primary Examiner: Campbell, Eggerton A.; Assistant Examiner: Chunduru, Suryaprabha
LREP Powers, Vincent M., Grossman, Paul D.
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1560
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a method for determining the number of repeat units in a repeat region of a target nucleic acid. In a first aspect, the method of the invention includes the steps of annealing a primer to a target nucleic acid; performing a first primer extension reaction using a first primer extension reagent; separating the target-primer hybrid and unreacted first primer extension reagent; performing a second primer extension reaction using a second primer extension reagent, wherein at least one of the first or second primer extension reagents includes an extendible **nucleotide** having a label attached thereto; separating the target-primer hybrid from unreacted second primer extension reagent; measuring a signal produced by the label; treating the label so as to render the label undetectable; and repeating the above steps until the signal is substantially less than a signal detected in a previous cycle. In a second aspect, the method of the invention includes the steps of annealing a primer to a target nucleic acid; performing a first primer extension reaction using a first primer-extension reagent; separating the target-primer hybrid from unreacted first primer extension reagent; performing a second primer extension reaction using a second primer extension reagent and with a primer termination reagent, the primer termination reagent including a **nucleotide** terminator having a label attached thereto; separating the target-primer hybrid from unreacted second primer extension reagent and unreacted primer termination reagent; measuring a signal produced by the label; and repeating the above steps until a signal is detected indicating incorporation of the **nucleotide** terminator. The invention further includes kits useful for practicing the above methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 20 OF 28 USPATFULL on STN
AN 2001:117163 USPATFULL
TI Thiol-derivatized nucleosides and oligonucleosides
IN Cook, Phillip Dan, Fallbrook, CA, United States
Manoharan, Muthiah, Carlsbad, CA, United States
PA ISIS Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S. corporation)
PI US 6265558 B1 20010724
AI US 1999-383856 19990826 (9)
RLI Continuation of Ser. No. US 1997-924326, filed on 5 Sep 1997, now patented, Pat. No. US 6114513 Continuation of Ser. No. US 1995-458396, filed on 2 Jun 1995, now patented, Pat. No. US 5852182 Continuation-in-part of Ser. No. US 1993-116801, filed on 3 Sep 1993 Continuation-in-part of Ser. No. US 211882, now patented, Pat. No. US 5578718 , said Ser. No. US 116801 And Ser. No. US 1999-383856, filed on

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26 Aug 1999 Continuation-in-part of Ser. No. US 1991-782374, filed on 24 Oct 1991, now abandoned Continuation-in-part of Ser. No. US 1990-463358, filed on 11 Jan 1990, now abandoned Continuation-in-part of Ser. No. US 1990-566977, filed on 13 Aug 1990, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Wilson, James O.
LREP Woodcock Washburn Kurtz Mackiewicz & Norris LLP
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1640
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Nucleosides and linked nucleosides functionalized to include alkylthiol chemical functionality at ribofuranosyl positions, nucleosidic base positions, or on internucleoside linkages. In certain embodiments, the compounds of the invention further include steroids, reporter molecules, reporter enzymes, lipophilic molecules, peptides or proteins attached to the nucleosides through the alkylthio group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 21 OF 28 USPATFULL on STN
AN 2000:117894 USPATFULL
TI Thiol-derivatized oligonucleotides
IN Cook, Phillip Dan, San Marcos, CA, United States
Manoharan, Muthiah, Carlsbad, CA, United States
PA Isis Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S. corporation)
PI US 6114513 20000905
AI US 1997-924326 19970905 (8)
RLI Continuation of Ser. No. US 1995-458396, filed on 2 Jun 1995, now patented, Pat. No. US 5852182 which is a continuation-in-part of Ser. No. US 116801 which is a continuation-in-part of Ser. No. WO 1992-US9196, filed on 23 Oct 1992, now patented, Pat. No. WO 5578718 which is a continuation-in-part of Ser. No. US 1991-782374, filed on 24 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-463358, filed on 11 Jan 1990, now abandoned which is a continuation-in-part of Ser. No. US 1990-566977, filed on 13 Aug 1990, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Wilson, James O.
LREP Woodcock Washburn Kurtz MacKiewicz & Norris LLP
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1728
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Nucleosides and linked nucleosides functionalized to include alkylthiol chemical functionality at ribofuranosyl positions, nucleosidic base positions, or on internucleoside linkages. In certain embodiments, the compounds of the invention further include steroids, reporter molecules, reporter enzymes, lipophilic molecules, peptides or proteins attached to the nucleosides through the alkylthio group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 22 OF 28 USPATFULL on STN
AN 2000:109545 USPATFULL
TI Assays using base protected table 1
IN Hanna, Michelle M., Norman, OK, United States

09567863

PA The Board of Regents of the University of Oklahoma, United States (U.S. corporation)
PI US 6107039 20000822
AI US 1998-165451 19981002 (9)
RLI Continuation of Ser. No. US 1997-899022, filed on 23 Jul 1997, now patented, Pat. No. US 6008334
PRAI US 1996-22573P 19960724 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Marschel, Ardin H.
LREP Dunlap, Codding & Rogers, PC.
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 9 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 2325
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to protected **thiol** analogs of pyrimidine **bases** for syntheses of DNA and RNA by chemical or enzymatic methods. The subject analogs include reagents suitable for DNA or RNA synthesis via phosphoramidite, H-phosphonate or phosphotriester chemistry as well a reagents suitable for use by RNA and DNA polymerase, including thermostable polymerases employed by PCR or other nucleic acid amplification techniques. The **nucleotide** analogs synthesized by methods of this invention can thus be incorporated into oligonucleotides or polynucleotides, deprotected and derivatized with a functional group. In some cases the protecting groups are themselves antigenic and may be left on the oligonucleotides or polynucleotides for detection with antibodies. A method of synthesizing oligonucleotides with a functional group using the subject **nucleotide** analogs is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 23 OF 28 USPATFULL on STN
AN 1999:170726 USPATFULL
TI Base-protected **nucleotide** analogs with protected thiol groups
IN Hanna, Michelle M., Norman, OK, United States
PA The Board of Regents of the University of Oklahoma, Norman, OK, United States (U.S. corporation)
PI US 6008334 19991228
AI US 1997-899022 19970723 (8)
PRAI US 1996-22573P 19960724 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Marschel, Ardin H.
LREP Dunlap & Codding, P.C.
CLMN Number of Claims: 37
ECL Exemplary Claim: 1
DRWN 9 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 2322
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to protected **thiol** analogs of pyrimidine **bases** for syntheses of DNA and RNA by chemical or enzymatic methods. The subject analogs include reagents suitable for DNA or RNA synthesis via phosphoramidite, H-phosphonate or phosphotriester chemistry as well a reagents suitable for use by RNA and DNA polymerase, including thermostable polymerases employed by PCR or other nucleic acid amplification techniques. The **nucleotide** analogs synthesized by methods of this invention can thus be incorporated into oligonucleotides or polynucleotides, deprotected and derivatized with a functional group. In some cases the protecting groups are themselves antigenic and may be left on the oligonucleotides or

polynucleotides for detection with antibodies. A method of synthesizing oligonucleotides with a functional group using the subject **nucleotide** analogs is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 24 OF 28 USPATFULL on STN
AN 1999:102675 USPATFULL
TI Electrochemical-based molecular detection apparatus and method
IN Krihak, Michael, Phoenix, AZ, United States
Shieh, Chan-Long, Paradise Valley, AZ, United States
PA Motorola, Inc., Schaumburg, IL, United States (U.S. corporation)
PI US 5945286 19990831
AI US 1997-956676 19971023 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Marschel, Ardin H.
LREP Parsons, Eugene A., Koch, William E.
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 304
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A molecular detection apparatus including an electrode, a peptide nucleic acid probe covalently bonded to the electrode and a protective layer covering portions of the electrode not having attached probes which prevents oxidation/reduction of intercalator molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 25 OF 28 USPATFULL on STN
AN 1999:102673 USPATFULL
TI Length determination of nucleic acid repeat sequences by discontinuous primer extension
IN Livak, Kenneth J., San Jose, CA, United States
Lowe, Adam L., San Francisco, CA, United States
Blasband, Andrew J., Redwood City, CA, United States
PA The Perkin-Elmer Corporation, Foster City, CA, United States (U.S. corporation)
PI US 5945284 19990831
AI US 1997-863437 19970527 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Whisenant, Ethan
LREP Grossman, Paul D.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 903
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB In a first aspect, the method of the invention includes the steps of annealing a primer to a target nucleic acid; performing a first primer extension reaction using a first primer extension reagent; separating the target-primer hybrid and unreacted first primer extension reagent; performing a second primer extension reaction using a second primer extension reagent, wherein at least one of the first or second primer extension reagents includes an extendible **nucleotide** having a label attached thereto; separating the target-primer hybrid from unreacted second primer extension reagent; measuring a signal produced by the label; treating the label so as to render the label undetectable; and repeating the above steps until the signal is substantially less than a signal detected in a previous cycle. In a second aspect, the

method of the invention includes the steps of annealing a primer to a target nucleic acid; performing a first primer extension reaction using a first primer-extension reagent; separating the target-primer hybrid from unreacted first primer extension reagent; performing a second primer extension reaction using a second primer extension reagent and with a primer termination reagent, the primer termination reagent including a **nucleotide** terminator having a label attached thereto; separating the target-primer hybrid from unreacted second primer extension reagent and unreacted primer termination reagent; measuring a signal produced by the label; and repeating the above steps until a signal is detected indicating incorporation of the **nucleotide** terminator. The invention further includes kits useful for practicing the above methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 26 OF 28 USPATFULL on STN
AN 1998:160111 USPATFULL
TI Thiol-derivatized oligonucleosides
IN Cook, Phillip Dan, San Marcos, CA, United States
Manoharan, Muthiah, Carlsbad, CA, United States
PA ISIS Pharmaceuticals Inc., Carlsbad, CA, United States (U.S. corporation)
PI US 5852182 19981222
AI US 1995-458396 19950602 (8)
RLI Continuation-in-part of Ser. No. US 1993-116801, filed on 3 Sep 1993, now patented, Pat. No. US 5578718 which is a continuation-in-part of Ser. No. US 1991-782374, filed on 24 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-463358, filed on 11 Jan 1990, now abandoned And a continuation-in-part of Ser. No. US 1990-566977, filed on 13 Aug 1990, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Wilson, James O.
LREP Woodcock Washburn Kurtz Mackiewicz & Norris LLP
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1509
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Nucleosides and linked nucleosides functionalized to include alkylthiol chemical functionality at ribofuranosyl positions, nucleosidic base positions, or on internucleoside linkages. In certain embodiments, the compounds of the invention further include steroids, reporter molecules, reporter enzymes, lipophilic molecules, peptides or proteins attached to the nucleosides through the alkylthio group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 27 OF 28 USPATFULL on STN
AN 96:109084 USPATFULL
TI Thiol-derivatized nucleosides
IN Cook, Phillip D., Carlsbad, CA, United States
Manoharan, Muthiah, Carlsbad, CA, United States
PA ISIS Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S. corporation)
PI US 5578718 19961126
AI US 1993-116801 19930903 (8)
RLI Continuation-in-part of Ser. No. US 1994-211882, filed on 22 Apr 1994 which is a continuation-in-part of Ser. No. US 1991-782374, filed on 24 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-463358, filed on 11 Jan 1990, now abandoned And Ser. No. US

09567863

1990-566977, filed on 13 Aug 1990, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Wilson, James O.
LREP Woodcock Washburn Kurtz Mackiewicz & Norris
CLMN Number of Claims: 25
ECL Exemplary Claim: 1,24
DRWN No Drawings
LN.CNT 1330
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Nucleosides and linked nucleosides functionalized to include alkylthiol chemical functionality at ribofuranosyl positions, nucleosidic base positions, or on internucleoside linkages. In certain embodiments, the compounds of the invention further include steroids, reporter molecules, reporter enzymes, lipophilic molecules, peptides or proteins attached to the nucleosides through the alkylthio group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 28 OF 28 USPATFULL on STN
AN 96:77631 USPATFULL
TI Methods for the solid phase synthesis of thiazolidinones, metathiazanones, and derivatives thereof
IN Holmes, Christopher P., Sunnyvale, CA, United States
PA AFFYMAX Technologies NV, Curacao, Netherlands Antilles (non-U.S. corporation)
PI US 5549974 19960827
AI US 1994-265090 19940623 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Datlow, Philip I.; Assistant Examiner: Wong, King Lit
LREP Stevens, Lauren L.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 28 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 2054
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides an efficient and versatile method for the combinatorial synthesis and screening of libraries of 4-thiazolidinones, metathiazanones, and derivatives thereof. In order to expediently synthesize a combinatorial library of derivatives based upon these core structures, a general methodology for the solid phase synthesis of these derivatives is also provided. Arrays of thiazolidinones, metathiazanones, and derivatives thereof useful as peptidomimetics and for the identification of agents having antifungal, antihistaminic, or antimicrobial activity or use in the treatment of inflammation, hypertension, renal failure, congestive heart failure, uremia and other conditions can be prepared using this method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.